Amendment to the Abstract:

The Abstract has been amended. A revised Abstract is attached.

An electrochemical sensor apparatus ~~(1)~~ and method for measuring scale, such as mineral scale or other particulates, which deposit on the surface of pipelines or process equipment. The device has an electrochemical cell ~~(1)~~ with a working electrode ~~(21)~~ and fluid flow control means ~~(15)~~ positioned so as to release a fluid jet onto the working electrode ~~(21)~~. The velocity of the fluid jet is controllable and is defined by the Reynolds number of the fluid when the fluid is in the fluid flow control means ~~(15)~~. Measurement of the electrical output from the electrochemical cell ~~(1)~~ and the Reynolds number provide a measure of the build-up of scale on the working electrode ~~(21)~~.

Attachment